



#17/Brief  
Appeal  
Lowman  
2-1303

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of : Confirmation No. 6183  
Hideyuki YUYAMA et al. : Docket No. 00120/P-4864  
Serial No.09/335,189 : Group Art Unit 3626  
Filed June 17, 1999 : Examiner R. Morgan

DRUG PREPARATION INSTRUCTION  
SYSTEM

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEES FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975

**APPELLANTS' BRIEF**

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

This is an appeal from the final rejection of claims 13-31.

**REAL PARTY IN INTEREST**

The real party in interest is Kabushiki Kaisha Yuyama Seisakusho.

**RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences.

**STATUS OF CLAIMS**

Claims 13-31 are pending in the application. Each of claims 13-31 are rejected.

**STATUS OF AMENDMENTS**

There are no amendments filed subsequent to the final rejection in the application.

## **SUMMARY OF THE INVENTION**

The drug preparation order system of the present invention permits a user to easily modify a control unit, thereby modifying printing instructions corresponding to various printer stations. One aspect of a system in accordance with the present invention enables a user to view a structured correlation between drug preparation data and the various printer stations. A further aspect of a system in accordance with the present invention enables a user to change the structured correlation between drug preparation data and the various printer stations. In a specific embodiment of a system in accordance with the present invention, the structured correlation between drug preparation data and the various printer stations is a table, for example, as illustrated in FIG. 4, and discussed on pages 10 and 11.

In a conventional drug preparation order system for example as described on pages 1-4 of the application, a plurality of drug preparation stations are arranged, such that each station prepares a specific type of drug. However, a problem with such a station as described in the second paragraph on page 3 of the specification arises if there is a relocation of a drug preparation station. Specifically, it is necessary to reprogram the control circuit of the system, which is extremely time-consuming and troublesome. Such a problem additionally arises if a new drug preparation station is added to the system.

Therefore, the drug preparation order system of the present invention overcomes the problems associated with the conventional drug preparation system and permits a user to easily modify printing instructions corresponding to various printer stations.

The present invention, as defined in independent claim 13, is directed to a drug preparation order system. The drug preparation order system comprises a control unit (item 3, page 7, line 16), a monitor (item 5, page 7, line 21), a plurality of printers (item 4, page 7, line 20) and an input device (items 7 and 8, page 8, line 7). The control unit is operable to carry out logic operations and to output control signals based on drug preparation data. The control unit comprises a data storage portion (item 3b<sub>2</sub>, page 8, line 6) and a printer setting portion (item 3b<sub>1</sub>, page 8, line 6). The data storage portion is operable to store a first set of data corresponding to the drug preparation data (Fig. 3, page 9, line 17 - page 10, line 6). The monitor is connected to the control unit and is operable to display a second set of data corresponding to the drug preparation data. The plurality of printers are connected to the control unit and are operable to print on drug preparation order sheets in response

to the control signals. The input device is operable to enable a user to enter the drug preparation data and a third set of data corresponding to a structured correlation (page 18, lines 2-8) between the drug preparation data and the plurality of printers into the control unit (page 11, line 24 - page 12, line 2). The printer setting portion is operable to store the third set of data (page 9, lines 9-13). The monitor is further operable to display a fourth set of data corresponding to the structured correlation between the drug preparation data and the plurality of printers (Fig. 4, page 10, lines 15-17). The input device and the control unit are operable to enable the user to modify the third set of data, so as to change the correlation between the drug preparation data and the plurality of printers, by way of modifying the fourth set of data (page 10, line 23 - page 11, line 3).

The present invention as defined in claim 14 requires all the elements of the invention as defined in claim 13, wherein the drug preparation data includes data corresponding to a patient name, a patient code, a drug code, taking directions, and dosages (page 13, lines 6-13).

The present invention as defined in claim 15 requires all the elements of the invention as defined in claim 13, and further comprises a first type of communicator (item 10, page 17, lines 1-3) connected to the control unit and a plurality of trays (item 6, page 8, lines 11-17). The first type of communicator is operable to transmit drug preparation order data provided by the control unit. The plurality of trays each have a second type of communicator (item 11, page 8, lines 20-23). The plurality of trays and the control unit are combined as a system. Each of the second type of communicators is operable to communicate with the first type of communicator. Each of said trays has a display portion (item 13, page 8, line 23) that is operable to display the drug preparation order data sent from the control unit by the first type of communicator.

The present invention as defined in claim 16 requires all the elements of the invention as defined in claim 15, wherein the printers are operable to print on a drug preparation order sheet, information indicating whether drugs have been put into a plurality of trays (page 18, lines 8-17).

The present invention as defined in claim 17 requires all the elements of the invention as defined in claim 16, wherein the control unit is operable to transmit identification information to the trays, when drug preparation order data is transmitted by the first type of communicator (page 11, line 15 - page 12, line 10).

The present invention as defined in claim 18 requires all the elements of the invention as defined in claim 16, wherein the control unit is operable to transmit information on whether guidance

is necessary, when drug preparation order data is transmitted by the first type of communicator (page 13, lines 23-25).

The present invention as defined in claim 19 requires all the elements of the invention as defined in claim 15, wherein the control unit is operable to transmit identification information to said trays, when drug preparation order data is transmitted by the first type of communicator.

The present invention as defined in claim 20 requires all the elements of the invention as defined in claim 19, wherein the control unit is operable to transmit information on whether guidance is necessary, when drug preparation order data is transmitted by the first type of communicator.

The present invention as defined in claim 21 requires all the elements of the invention as defined in claim 15, wherein the control unit is operable to transmit information on whether guidance is necessary, when drug preparation order data is transmitted by the first type of communicator.

The present invention as defined in claim 22 requires all the elements of the invention as defined in claim 15, wherein in order to put drugs in a plurality of trays according to the drug types and the number of days for which the drugs are to be prescribed, the drugs can be assigned to the plurality of trays (page 18, lines 8-17).

The present invention as defined in claim 23 requires all the elements of the invention as defined in claim 22, wherein the printers are operable to print on a drug preparation order sheet, information indicating whether drugs have been put into a plurality of trays (page 15, lines 5-19).

The present invention as defined in claim 24 requires all the elements of the invention as defined in claim 22, wherein the control unit is operable to transmit identification information to the trays, when drug preparation order data is transmitted by the first type of communicator.

The present invention as defined in claim 25 requires all the elements of the invention as defined in claim 22, wherein the control unit is operable to transmit information on whether guidance is necessary, when drug preparation order data is transmitted by the first type of communicator.

The present invention, as defined in independent claim 26, is directed to a drug preparation order system for use with a drug preparation order sheet. The system comprises a control unit (item 3, page 7, line 16), a display (item 5, page 7, line 21), a plurality of printers (item 4, page 7, line 20), an input device (items 7 and 8, page 8, line 7), means for associating each of the plurality of sets of data with one of the drug type codes (item 3b<sub>2</sub>, page 8, line 6), means for associating each of said plurality of printers with one of the printer codes (item 3b<sub>1</sub>, page 8, line 6), means for displaying the

table on said display, means for changing the drug type codes and/or printer codes through said input device while the table is displayed on said display, and means for activating one of said printers that corresponds to the drug type code associated with one of the plurality of sets of data to print the one of the plurality of sets of data on a drug preparation order sheet upon entry of a command to print the one of the plurality of sets of data. The control unit carries out logic operations and outputs control signals and includes a memory. The display and the plurality of printers are connected to the control unit. The memory stores a table which includes a plurality of drug type codes and a plurality of printer codes, each of the drug type codes corresponding to one of the printer codes. An input device is operable to input external data into the memory, the external data comprises a plurality of sets of data, each set comprises drug data.

The present invention as defined in claim 27 requires all the elements of the invention as defined in claim 26, yet further comprises a first type of communicator (item 10, page 17, lines 1-3) and a plurality of trays (item 6, page 8, lines 11-17). The first type of communicator is connected to the control unit and is operable to transmit drug preparation order data provided by the control unit. The plurality of trays each have a second type of communicator (item 11, page 8, lines 20-23) and are combined with the control unit as a system. Each of the second type of communicators is operable to communicate with the first type of communicator. Each of the trays has a display portion (item 13, page 8, line 23) that is operable to display the drug data.

The present invention as defined in claim 28 requires all the elements of the invention as defined in claim 27, wherein the printers are operable to print on a drug preparation order sheet, information indicating whether drugs have been put into one of the plurality of trays. The control unit is further operable to transmit identification information to the trays when drug data is transmitted by the first type of communicator. The control unit is operable to transmit information on whether guidance is necessary when drug data is transmitted by the first type of communicator.

The present invention as defined in claim 29 requires all the elements of the invention as defined in claim 27, wherein the control unit is operable to transmit identification information to the trays when drug data is transmitted by the first type of communicator, and wherein the control unit is operable to transmit information on whether guidance is necessary when drug data is transmitted by the first type of communicator.

The present invention as defined in claim 30 requires all the elements of the invention as defined in claim 27, wherein the control unit is operable to transmit information on whether guidance is necessary when drug data is transmitted by the first type of communicator.

The present invention as defined in claim 31 requires all the elements of the invention as defined in claim 27, wherein in order to put drugs into said plurality of trays according to drug types and a number of days for which the drugs are to be prescribed, the drugs can be assigned to the plurality of trays. The printers are operable to print on a drug preparation order sheet, information indicating whether drugs have been put into a plurality of trays. The control unit is operable to transmit identification information to the trays, when drug data is transmitted by the first type of communicator. The control unit is further operable to transmit information on whether guidance is necessary, when drug data is transmitted by the first type of communicator.

## **ISSUES**

The main issue on appeal is whether Appellants' claims 13-31 are rendered obvious, under 35 U.S.C. § 103, over U.S. Patent No. 4,847,764 to Halvorson in view of U.S. Patent No. 5,537,626 to Kraslavsky et al. (Kraslavsky).

The above issue is more specifically directed to the following two questions:

I. Does the combination of the teachings of Halvorson in view of Kraslavsky suggest a limitation of claims 13 and 26 that is not explicitly taught by either Halvorson or Kraslavsky such that claims 13 and 26 would have been obvious over the combination of Halvorson in view of Kraslavsky within the meaning of 35 U.S.C. § 103(a)?

II. Does the Examiner provide sufficient sound scientific reasoning to combine the prior art to arrive at the invention as defined in claims 13 and 26 within the meaning of 35 U.S.C. § 103(a)?

## **GROUPING OF CLAIMS**

Claims 14-25 stand or fall with claim 13.

Claims 27-31 stand or fall with claim 26.

## **ARGUMENT**

Claim 13 requires a drug preparation order system comprising a control unit having a data storage portion and a printer setting portion, a monitor connected to said control unit, an input device, and a plurality of printers,

**wherein said monitor is operable to display a fourth set of data corresponding to the structured correlation between the drug preparation data and said plurality of printers, and**

**wherein said input device and said control unit are operable to enable the user to modify the third set of data, so as to change the correlation between the drug preparation data and the plurality of printers, by way of modifying the fourth set of data. (Emphasis Added)**

Claim 26 requires a drug preparation order system for use with a drug preparation order sheet. The system comprises a control unit including a memory **for storing a table which includes a plurality of drug type codes and a plurality of printer codes, each of said drug type codes corresponding to one of said printer codes**, a display, and a plurality of printers. The control unit further includes an input device, a means for associating each of a plurality of sets of data with one of the drug type codes, a means for associating each of the plurality of printers with one of the printer codes, **means for displaying the table on said display, means for changing the drug type codes and/or printer codes through the input device while displaying the table on the display**, and means for activating one of said printers that corresponds to the drug type associated with one of the plurality of sets of data to print the one of the plurality of sets of data on the drug preparation order sheet when a command to print the one of the plurality of sets of data is entered. (Emphasis Added)

On page 1 of the January 17<sup>th</sup> Office Action, the Examiner admits that Halvorson fails to teach the claimed correlation between the drug preparation data and the plurality of printers, wherein the correlation may be modified, as required in claim 13. The Examiner then cites Kraslavsky, which teaches the use of a printer software called Novell NetWare® that allows the user to control the printer's functions which are sent to a print server.

On pages 9 and 10 of the January 17<sup>th</sup> Office Action, the Examiner admits that Halvorson fails to teach the plurality of printer codes, means for associating each of said plurality of printers with one of the printer codes, means for changing the drug type codes and/or printer codes through said input device while the table is displayed on said display and means for activating one of said printers that

corresponds to the drug type code associated with one of the plurality of sets of data to print the one of the plurality of sets of data on a drug preparation order sheet upon entry of a command to print the one of the plurality of sets of data, as required in claim 26. The Examiner therefore again relies on Kraslavsky.

Question I:

Does the combination of the teachings of Halvorson in view of Kraslavsky suggest a limitation of claims 13 and 26 that is not explicitly taught by either Halvorson or Kraslavsky such that claims 13 and 26 would have been obvious over the combination of Halvorson in view of Kraslavsky within the meaning of 35 U.S.C. § 103(a)?

As Applicants indicated in the first paragraph on page 7 of the May 15<sup>th</sup> Response, **neither Kraslavsky nor Halvorson teaches**: a monitor that displays data corresponding to a structure correlation between drug preparation data and a plurality of printers or a system that provides a user the ability to change the correlation as required in claim 13; or a table that includes a plurality of drug-type codes and a plurality of printer codes, where each drug-type code corresponds to one of the printer codes, as required in independent claim 26. Applicants therefore urged that **a combination of the teachings of Halvorson and the teachings of Kraslavsky would fail to teach**: a monitor that displays data corresponding to a structure correlation between drug preparation data and a plurality of printers or a system that provides a user the ability to change the correlation as required in claim 13; or a table that includes a plurality of drug-type codes and a plurality of printer codes, where each drug-type code corresponds to one of the printer codes, as required in independent claim 26.

Nevertheless, the Examiner takes the position that if the printer software of Kraslavsky were incorporated into the teachings of Halvorson, that the combination would teach that which is required in each of independent claims 13 and 26. Specifically, in paragraph 5(B) of the final Office Action, the Examiner states that one cannot show obviousness by attacking references individually when the rejections are based on combinations of references, and cites for example *In re Keller*, 208 USPQ 871 (CCPA 1980).

Accordingly, the Examiner seems to take the position that 1) a combination of references need not expressly teach every element of the claimed invention and 2) when none of the applied prior art



references teach a required element of the claimed invention the Applicant is precluded from overcoming a rejection under 35 U.S.C. § 103 by pointing out that none of the individual prior art references teaches a required element of the claimed invention.

In *In re Keller*, the Applicant unsuccessfully attempted to argue that his claimed invention to ABC was not obvious over a combination of a first prior art teaching AB and a second prior art teaching BC because there was no motivation provided in either reference to modify the first prior art teaching with the second prior art teaching to arrive at the claimed invention. The court was not persuaded and determined that the prior art taken as a whole would suggest to a person of ordinary skill in the art to modify the first teaching with the second teaching. In any event each element of the prior art was taught in the combination of the applied prior art.

As opposed to the factual scenario of *In re Keller*, it is respectfully submitted that neither Halvorson nor Kraslavsky teaches required features in independent claim 13 and required features in independent claim 26. Therefore, the Applicants' previous "attacking [of the] references individually" was to indicate to the Examiner that since neither reference teaches a specific claim element, that the combination of references additionally fails to teach the specific claim element.

In any event, the Examiner asserts that although neither Halvorson nor Kraslavsky individually expressly teaches a required feature in claim 13 or a required feature in claim 26, the combination would suggest such required features. It is respectfully submitted that the Examiner's assertion is improper for the following reasons.

#### Claim 13:

In response to Applicants' argument that neither Halvorson nor Kraslavsky teaches a monitor that displays data corresponding to a structure correlation between drug preparation data and a plurality of printers or a system that provides a user to ability to change the correlation as required in claim 13, on page 5 of the August 12<sup>th</sup> Office Action, the Examiner asserts that:

"the proper combination of Halvorson and Kraslavsky would require that the monitor and printers used for displaying patient's inputted drug information as taught by Halvorson would have utilized the printing software as taught by Kraslavsky to allow users to redirect or reroute print job initiated by the system."

It is not clear from the record what constitutes a “proper combination.” Presumably, a “proper combination” is a combination that meets the guidelines provided for establishing a rebuttable *prima facie* case of obviousness within the meaning of 35 U.S.C. § 103. In this sense, it is respectfully submitted that the proposed combination is not a “proper combination” for the following reason.

Halvorson teaches a system for dispensing medications in a health care institution, wherein the system comprises a plurality of medication dispensing stations and wherein the inventory of each station is updated in a central computer. Specific instructions for dispensing medication may be printed at each station upon demand. In the Halvorson system, there is no indication that a first user, who is retrieving medication from one medication dispensing station, could (or would even need to) know what medication a second user is retrieving from a second medication dispensing station.

The system of Halvorson includes a dispenser operator, for example as discussed on in column 3, lines 57-60, that controls the locking and unlocking of access doors of the medication dispensing station. Accordingly, the dispensing station will only dispense medication to authorized personnel on demand (please note column 4, lines 28-32). The system of Halvorson relieves a user of the burden of determining what medications are located at which medication dispensing stations. Specifically, in the system of Halvorson, if a medication dispensing station is depleted of a supply of needed medication, restocking personnel is notified, the nurse is informed and the nurse is further advised of an alternate dispensing location (please note column 5, lines 17-25).

Therefore, in the system of Halvorson, a user of a first medication dispensing station is able to, on demand, access a particular patient’s prescription and print out instructions for the prescription. Furthermore, if the first medication dispensing station is depleted of the prescription, the user is informed of a second medication dispensing station from which the user will be able to, on demand, access the particular patient’s prescription and print out instructions for the prescription. The combination proposed by the Examiner runs contrary to the intentions of Halvorson. It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 218 USPQ 769 (CAFC 1983).

In particular, as discussed above, the dispensing system of Halvorson is designed to only permit authorized access to a medication dispensing station, when the nurse is at the station, and upon demand. Modifying the Halvorson system as proposed by the Examiner would increase the

probability of unauthorized access to a medication dispensing station. In particular, if a nurse were to remotely access a second medication dispensing station by using a first medication dispensing station and then travel to the second medication dispensing station to retrieve medication, the medication could be retrieved by an unauthorized person before the nurse arrives at the second medication dispensing station.

Accordingly, it is respectfully submitted that the Examiner's proposed combination is not a proper combination, let alone "the proper combination." Specifically, it is respectfully submitted that the Examiner's proposed combination would not "require" the monitor and printers used for displaying the patient's inputted drug information of Halvorson to utilize the printing software as taught by Kraslavsky to allow users to redirect or reroute a print job initiated by the system.

Therefore, it is respectfully submitted that the combination of Halvorson in view of Kraslavsky is not a "proper combination" and therefore fails to teach or suggest that which is required in independent claim 13.

Claim 26:

In response to Applicants argument that neither Halvorson nor Kraslavsky teaches a table that includes a plurality of drug-type codes and a plurality of printer codes, where each drug type code corresponds to one of the printer codes as required in claim 26, on pages 7 and 8 of the August 12<sup>th</sup> Office Action, the Examiner further states that:

"the proper combination of Halvorson and Kraslavsky would require that the database including information about a patient's name, drug codes and dosage direction as taught by Halvorson would have utilized the printing software as taught by Kraslavsky to enable users to adjust or change printing jobs according to a reference list stored in the database."

Yet again, it is respectfully submitted that the proposed combination is not a "proper combination" for the following reason.

As indicated in the above discussion regarding claim 13, in accordance with the system of Halvorson, a medication dispensing station prints instructions when the medications are dispensed therefrom upon demand by the nurse. There is no indication that the nurse will want, be permitted or be able to know what other medication dispensing stations are printing. Accordingly, there is no

indication that the nurse will want, be permitted or be able to "adjust or change printing jobs according to a reference list stored in the database."

Accordingly, it is respectfully submitted that the Examiner's proposed combination is not a proper combination, let alone "the proper combination." Specifically, it is respectfully submitted that the Examiner's proposed combination would not "require" the database including information about a patient's name, drug codes and dosage direction as taught by Halvorson to utilize the printing software as taught by Kraslavsky to enable users to adjust or change printing jobs according to a reference list stored in the database.

Therefore, it is respectfully submitted that the combination of Halvorson in view of Kraslavsky fails to teach or suggest that which is required in independent claim 26 within the meaning of 35 U.S.C. § 103.

## Question II

Does the Examiner provide sufficient sound scientific reasoning to combine the prior art to arrive at the invention as defined in claims 13 and 26 within the meaning of 35 U.S.C. § 103(a)?

The last three paragraphs on page 7 of the May 15<sup>th</sup> Response demonstrate that the Examiner's proposed motivation to combine the teachings of Halvorson with the teachings of Kraslavsky is improper. Specifically, the statement "thereby enabling printer patient's prescription information to be given out in a timely and more efficient manner" on the last paragraph of page 4 of the January 17, 2002 Office Action is not an explanation supported by specific factual findings based on evidence or sound scientific reasoning. In particular, first of all, there is no evidence that Halvorson does not give out patient's prescription information in a timely manner. Second of all, there is no evidence or any explanation based on sound scientific reasoning, as to how or why Halvorson would be able to give out a patient's prescription information in a more efficient manner by using the printer software of Kraslavsky.

In paragraph 5(D), on page 7 of the Office Action, the Examiner provides a lengthy response to the Applicants' position. It seems that the Examiner cites a plurality of decided cases to support the long held notion that obviousness is determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. However, the Examiner fails to address the two points

raised by the Applicants in the May 15<sup>th</sup> Response. On the contrary, the Examiner points to the specific general disclosures in the references and asserts that the selected portions of the respective references specifically support the particular motivation and/or an explanation based on the logic and scientific reasoning of one ordinarily skilled in the art at the time of the invention. However, such "select portions" of Kraslavsky, fail to support the Examiner's conclusion. Specifically, column 2, lines 5-16 of the reference merely discloses "providing structure and function on a circuit board coupled to a peripheral which will permit the peripheral to be a responsive, intelligent member of a network." Further, column 12, lines 16-13 of Kraslavsky discloses "a menu-driven utility that allows a user (the printer consul operator) to create a new print server, configure up to 16 local or remote printer ports, create print cues, assign cues to printers, and start/stop printer and server operations."

It seems that the Examiner is taking the position that the Novell NetWare® can do anything related to creating print servers, configuring local or remote print ports, creating print cues, assigning cues, and starting/stopping printer and server operations. The Examiner then takes an unsupported leap of logic and asserts that the general teachings of Kraslavsky therefore would suggest to one of ordinary skill in the art that which is specifically required in each of claims 13 and 26. In essence, this position conveniently enables the Examiner to ignore the required elements of claims 13 and 26.

It is respectfully submitted that such a position is not supported by the decision of *In re Sang Su Lee*, 277 F.3d 1338, 61 USPQ.2d (CAFC 2002), wherein the court stated that the factual inquiry whether to combine references must be "based on objective evidence of record." In *Lee*, the court stated that the Examiner's conclusory statement that "the demonstration mode is just a programmable feature which can be used in many different devices for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and that it functions as a tutorial" do not adequately address the issue of motivation to combine. More importantly, the court stated that "this factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority." The court then correctly asserted that "it is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to '[use] that which the Inventor taught against the feature,'" citing *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ (BNA) 303, 312-13 (Fed. Cir. 1983).

It is respectfully submitted that the general description of a software application in Kraslavsky would not suggest to one of ordinary skill in the art to modify the system of Halvorson such that: a monitor can display data corresponding to a structured correlation between drug preparation data and a plurality of printers or a system that provides a user the ability to change the correlation as required in claim 13; or a medication dispensing station would include a table having a plurality of drug-type codes and a plurality of printer codes, where each drug-type code corresponds to one of the printer codes, as required in independent claim 26.

Furthermore, the motivation to enable "printed patient's prescription information to be given out in a timely and more efficient manner" based on the Examiner's speculation and is not based on objective evidence of record in the present application. Specifically, as stated in the Response filed May 15, 2002, Applicants reassert that there is no evidence that the printing software of Kraslavsky would enable the Halvorson system to give out patient's prescription information in a "timely and more efficient manner." Further, the Examiner has not presented any evidence or sound scientific reasoning as to how or why Halvorson would be able to give out patient's prescription information in a more efficient manner by using the printer software of Kraslavsky.

Therefore, it is respectfully submitted that the stated "motivation" set forth in the final Office Action to combine the teachings of Halvorson and the teachings of Kraslavsky is based on the Examiner's speculation, and is therefore improper.

## **APPENDIX**

A copy of the claims on appeal is set forth in an Appendix immediately following the conclusion and signature, and is incorporated herein by reference.

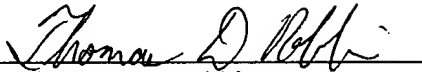
## **CONCLUSION**

In view of the above, it is apparent that the prior art reference, taken alone or in combination, fail to disclose or suggest the above claims in combination. Therefore, for the reasons stated above, the Examiner's decision to finally reject claims 13-31 should be reversed.

This brief is submitted in triplicate with the requisite fee of \$320.00.

Respectfully submitted,

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## **APPENDIX - Claims on Appeal**

13. A drug preparation order system comprising:

a control unit operable to carry out logic operations and to output control signals based on drug preparation data, said control unit comprising a data storage portion and a printer setting portion, said data storage portion being operable to store a first set of data corresponding to the drug preparation data;

a monitor connected to said control unit, said monitor being operable to display a second set of data corresponding to the drug preparation data;

a plurality of printers connected to said control unit, said plurality of printers being operable to print on drug preparation order sheets in response to the control signals; and

an input device operable to enable a user to enter the drug preparation data and a third set of data corresponding to a structured correlation between the drug preparation data and said plurality of printers into said control unit,

wherein said printer setting portion is operable to store the third set of data,

wherein said monitor is operable to display a fourth set of data corresponding to the structured correlation between the drug preparation data and said plurality of printers, and

wherein said input device and said control unit are operable to enable the user to modify the third set of data, so as to change the correlation between the drug preparation data and the plurality of printers, by way of modifying the fourth set of data.

14. The system of claim 13, wherein the drug preparation data includes data corresponding to a patient name, a patient code, a drug code, taking directions, and dosages.

15. The system of claim 13, further comprising:

a first type of communicator connected to said control unit, said first type of communicator being operable to transmit drug preparation order data provided by said control unit,

a plurality of trays, each having a second type of communicator, said plurality of trays and said control unit are combined as a system,

wherein each of said second type of communicators is operable to communicate with said first type of communicator,

wherein each of said trays has a display portion, and



wherein said display portions are operable to display the drug preparation order data sent from said control unit by said first type of communicator.

16. The system of claim 15, wherein said printers are operable to print on a drug preparation order sheet, information indicating whether drugs have been put into a plurality of trays.

17. The system of claim 16, wherein said control unit is operable to transmit identification information to said trays, when drug preparation order data is transmitted by said first type of communicator.

18. The system of claim 16, wherein said control unit is operable to transmit information on whether guidance is necessary, when drug preparation order data is transmitted by said first type of communicator.

19. The system of claim 15, wherein said control unit is operable to transmit identification information to said trays, when drug preparation order data is transmitted by said first type of communicator.

20. The system of claim 19, wherein said control unit is operable to transmit information on whether guidance is necessary, when drug preparation order data is transmitted by said first type of communicator.

21. The system of claim 15, wherein said control unit is operable to transmit information on whether guidance is necessary, when drug preparation order data is transmitted by said first type of communicator.

22. The system of claim 15, wherein in order to put drugs in a plurality of trays according to the drug types and the number of days for which the drugs are to be prescribed, the drugs can be assigned to said plurality of trays.

23. The system of claim 22, wherein said printers are operable to print on a drug preparation order sheet, information indicating whether drugs have been put into a plurality of trays

24. The system of claim 22, wherein said control unit is operable to transmit identification information to said trays, when drug preparation order data is transmitted by said first type of communicator.

25. The system of claim 22, wherein said control unit is operable to transmit information on whether guidance is necessary, when drug preparation order data is transmitted by said first type of communicator.

26. A drug preparation order system for use with a drug preparation order sheet, said system comprising:

- a control unit for carrying out logic operations and outputting control signals, said control unit including a memory;

- a display connected to said control unit; and

- a plurality of printers connected to said control unit;

- said memory storing a table which includes a plurality of drug type codes and a plurality of printer codes, each of the drug type codes corresponding to one of the printer codes,

- said control unit further including:

- an input device operable to input external data into said memory, the external data comprising a plurality of sets of data, each set comprising drug data,

- means for associating each of the plurality of sets of data with one of the drug type codes;

- means for associating each of said plurality of printers with one of the printer codes;

- means for displaying the table on said display;

- means for changing the drug type codes and/or printer codes through said input device while the table is displayed on said display; and

- means for activating one of said printers that corresponds to the drug type code associated with one of the plurality of sets of data to print the one of the plurality of sets of data on a drug preparation order sheet upon entry of a command to print the one of the plurality of sets of data.

27. The system of claim 26, further comprising:

a first type of communicator connected to said control unit, said first type of communicator being operable to transmit drug preparation order data provided by said control unit,

a plurality of trays, each having a second type of communicator, said plurality of trays and said control unit being combined as a system,

wherein each of said second type of communicators is operable to communicate with said first type of communicator,

wherein each of said trays has a display portion, and

wherein said display portions are operable to display the drug data.

28. The system of claim 27, wherein said printers are operable to print on a drug preparation order sheet, information indicating whether drugs have been put into one of said plurality of trays,

wherein said control unit is operable to transmit identification information to said trays when drug data is transmitted by said first type of communicator, and

wherein said control unit is operable to transmit information on whether guidance is necessary when drug data is transmitted by said first type of communicator.

29. The system of claim 27, wherein said control unit is operable to transmit identification information to said trays when drug data is transmitted by said first type of communicator, and

wherein said control unit is operable to transmit information on whether guidance is necessary when drug data is transmitted by said first type of communicator.

30. The system of claim 27, wherein said control unit is operable to transmit information on whether guidance is necessary when drug data is transmitted by said first type of communicator.

31. The system of claim 27, wherein in order to put drugs into said plurality of trays according to drug types and a number of days for which the drugs are to be prescribed, the drugs can be assigned to said plurality of trays,

wherein said printers are operable to print on a drug preparation order sheet, information indicating whether drugs have been put into a plurality of trays,

wherein said control unit is operable to transmit identification information to said trays, when drug data is transmitted by said first type of communicator, and

wherein said control unit is operable to transmit information on whether guidance is necessary, when drug data is transmitted by said first type of communicator.